DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge Program 333 Burma Rd.
Oakland, CA 94607
(510) 622-5660, (510) 286-0550 fax



November 05, 2007

Contract No. 04-0120F4 04-SF-80-13.2 / 13.9 Self-Anchored Suspension Bridge Letter No. 05.03.01-000793

Michael Flowers Project Executive American Bridge/Fluor Enterprises, a JV 375 Burma Road Oakland, CA 94607

Dear Michael Flowers,

Project Schedule Submission for October 2007

The Department has completed review of Submittals ABF-SUB-000397R0, "Project Schedule Monthly Update No.13," (Primavera file "ABF.U13.R0.102007.xer") and ABF-SUB-000398R0, "Project Schedule Monthly Update No.12 Status," (Primavera file "ABF.U13.S0.102007.xer").

The update file, "S0," is an update of the September 2007 schedule which contains actual start dates, actual finish dates, estimated remaining durations and expected finish dates. The revision file, "R0," is ABF's revised work plan for completing the Project.

These schedule submissions are "Accepted as Noted," as ABF's current plan to complete the work. Comments concerning the October 2007 schedule revision, "R0," are listed below. It is important to note that this schedule review is not all-inclusive due to the significant changes that have occurred since the September 2007 schedule submission.

- 175 new activities added (average duration ~35 days each)
- 287 activities started but have not been progressed during this period
- 31 as-built activities added
- 38 in-progress activities added
- 168 activities are being performed out of sequence
- 14 activities original durations modified
- 45 activities with diminishing progress
- 420 activity codes deleted
- 2877 activity codes added
- 1168 activity codes modified
- 81 existing activity relationships deleted
- 335 relationships added when activity added
- 62 added Expected Finish Dates

A Project and Schedule Status

A1 Number 1.4.5.1: It is noted that at least 32 CCOs have been formally executed. Verify that the proposed CCO activities currently existing in the schedule are sufficient for ABF planning purposes; contain the proper logic ties, coding, and resource assignments.

- A2 **Number 1.7.3:** There are currently 2 NOPC's outstanding. ABF's protest of CCO 21 has been terminated due to the lack of notice as required by Contract.
- A3 **Number 1.9.1:** The Department's response to ABF-CAL-LTR-000332 was discussed during the October 17, 2007 Weekly Schedule Meeting.
- A4 The following two activities are in progress, but the remaining durations are set to zero while the physical percent completes are less than 100%. Review and revise accordingly.

| Activity ID | Activity Name | OD | AD | RD | TD | TF | Start | Finish | Expected Finish | Duration % | Duration % of Original | Physical % Complete |
|-------------|--|----|----|----|-----|-----|-------------|-----------|--------------------|------------|------------------------------|------------------------|
| W2SUB001180 | Prepare AWD - Fit-Up & Welding Procedure (FWP) - West Deviation Saddle "E" - Line Perform Fabrication Facility Engineering - | 68 | 72 | 0 | 72 | 176 | 11-Jul-07 A | 22-Oct-07 | 10-Oct-07 | 100% | 105.88% | • |
| T1FAB001120 | CNC Data (S1 - S3) - T1 Lift 1 | 74 | 51 | 0 | 102 | 53 | 15-Aug-07 A | 19-Dec-07 | 30-Oct-07 | 100% | 68.92% | 50% |

- A5 The following three activities were recently added, but the original durations were set to 0 days. Verify and revise accordingly.
 - A51 **T1FABBJ1122** (Perform Fabrication Facility Engineering CNC Data (External Components) T1 Lift 1)
 - A52 **BDSUBBJ3464** (Prepare AWD Detailing Rib Stiffener & Plate Details BG Lifts 11E, 11W Pkg 56 Submittal 0290 rev 1)
 - A53 **BDSUBBJ3487** (Prepare AWD Rib Stiffener & Plate Details BG Lifts 11E, 11W Pkg 56 Submittal 0301 rev 1).
- A6 There are numerous activities that contain lag relationships. The use of these relationships creates difficulties in monitoring and tracking progress. Many Finish to Start lag relationships should represent activities. It is preferred that the lags are replaced with task activities and the use of lags minimized. Refer to attached lag report on the main schedule (ABF.U13.R0.071020 SAS Project Update 13 dd 10/20/07 rev 0) and the RFI schedule (ABF.U13.RFI-R0 SAS Project RFI As-Built dd 10/20/07 rev 0) for a list of activities with lag greater than 5 days. (LagReport_MainSchedule_greaterthan5d.pdf and LagReport_RFISchedule.pdf).
- A7 There are numerous activities in the schedule with durations greater than 20 days. As agreed during our weekly schedule meetings, activities with durations greater than 20 days starting within six months of the data date would be broken down into more detailed activities with appropriate durations. The activities of particular concern are attached. Modify the activity type to a level of effort and provide additional details of the summary activities as agreed. (Durations_Greater_20days.pdf)

B Area Specific Detail – W2 Cap Beam

B1 Number 2.3.2: It is noted that Hinge K fabrication Activity W2FAB000190 was increased by 110 days (54% increase from 205 days to 315 days) and that the level of detail increased by ~60 activities. Provide material procurement dates.

C Area Specific Detail – Temp Towers

C1 **Number 3.3.1:** Resubmit Traylor- Dutra Temporary Tower "A" & "B" foundation and excavation for review and acceptance.

D Area Specific Detail - OBG / Bridge Deck

- D1 Number 4.2.1.1: See the response to RFI 777R3, dated October 26, 2007. The impacts, if any, of this RFI will be discussed at the OBG Team Meetings.
- D2 **Number 4.2.1.2:** CCO 44 ATP was issued on 09/21/07. The Cable Tray related work is in process.
- D3 Number 4.2.1.3: Please refer to section H, Numbers 8.2.2.1, and 8.2.2.2 for any MEP related issues and or resolution.
- D4 Number 4.2.1.4: CCO 44, Barrier Modification access to bolts at the light pedestals ATP was issued on 9/21/07 to resolve this problem. Meanwhile, ABFJV submitted RFIs 565R2, R3 and R4, which required additional evaluation to access the bolts at the light pedestal. The Department is currently evaluating these RFIs to resolve this issue.
- D5 Number 4.2.1.5: CCO 53 was issued to address grinding of deck welds on both sides of the OBG plate deck and an ATP was issued on 09/20/07 to proceed with this CCO. The request made in RFI 153 was approved to accommodate ZPMC's means and methods.

E Area Specific Detail - T1 Tower

- E1 Numbers 5.1.3.3, 5.1.3.4, 5.1.3.5: There are numerous welding issues in conjunction with T1 Tower Mock-Ups (Tower Diaphragm 3B, Tower Lift Erection Splice, and Tower Lift Section Splice). It is understood that these issues are in the process of resolution and work is progressing on the three Mock-ups.
- E2 Number 5.3.4: There is concern that the described logic revision has created what appears to be unrealistic minimal float in the "High Strength Grout" path subsequent to CCO 36. This path includes procuring supplier, preparing WD for West Deviation Saddle, Mock-up for W2, Mock-up for T1 base plate, procuring grout, and grouting of the T1 base plate. It is understood that the grout requirements are currently being reviewed. This logic path should be reviewed, and revised if appropriate, prior to submission of the November 2007 schedule submission.
- E3 **Number 5.4.1:** There are currently 12 Non Conformance Reports issued to ZPMC for the Tower and OBG fabrication. Provide this information in future narrative reports, including the date issued and resolved.

F Area Specific Detail – Cable System

- F1 Number 6.2.1.1: Refer to Item H, Number 8.2.1.4 for a response to this issue.
- F2 **Number 6.2.1.2:** The Department considers this a "Means and Methods" issue. Furthermore, ABF has indicated in ABF-CAL-LTR-000331 that there are no schedule impacts associated with Option #6.

F3 **Number 6.3.2:** The provided file indicates Activity CASUB000010 "DELETED Hinge A Reaction Available for Measurement" with an actual finish date of 13-Oct-07 rather than a "Finish on or after" constraint of 3/31/08 as indicated in the Narrative. Confirmation of the intended logic is requested.

G Area Specific Detail - E2 Cross Beam

G1 No Comments

H Area Specific Detail – MEP Services

- H1 Numbers 8.2.1.1 through 8.2.1.7: These issues have been discussed in the weekly MEP coordination meetings. Any changes resulting from RFIs will be addressed in a change order. It is our understanding that the issues identified in Items 8.2.1.1 8.2.1.7, have no known schedule impacts at this time. Provide a time impact analysis if any of these potential issues affect the controlling operation in the future.
- H2 Number 8.2.1.1: RFI 941 and RFI 942, regarding tower marker and aviation lights, are currently being reviewed.
- H3 **Number 8.2.1.2:** These RFIs are being discussed in the weekly MEP meetings. Any changes resulting from these RFIs will be addressed in a change order.
- H4 Number 8.2.1.3: A response to RFI 707R3, regarding the utility panels and pull boxes at the tower, was provided on October 25, 2007 and RFI 707R4 is currently being reviewed.
- H5 Number 8.2.1.4: The light fixture configurations are currently being evaluated.
- H6 **Number 8.2.1.5:** Per ABF's request, the Department has provided suggested options for the wireway routing.
- H7 Numbers 8.2.2.1 and 8.2.2.2: See the previous comment Item H1 in State letter 05.03.01-000551, issued September 11, 2007.

Sincerely,

GARY PURSELL Resident Engineer

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cc: Don Ross file: 05.03.01